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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,333	09/25/2003	Keisuke Matsuo	00684.003531.	4129
5514	7590	05/09/2005	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO			VO, ANH T N	
30 ROCKEFELLER PLAZA			ART UNIT	
NEW YORK, NY 10112			PAPER NUMBER	
			2861	

DATE MAILED: 05/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/669,333

Applicant(s)

MATSUO ET AL.

Examiner

Anh T.N. Vo

Art Unit

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 and 2 is/are allowed.
- 6) ☒ Claim(s) 3 and 4 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) *AV*
Paper No(s)/Mail Date 2/17/04, 8/12/04 and 10/15/04
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

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DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The references cited on PTO 1449 have been considered.

Specification

The specification has been checked to the extent necessary to determine the presence of all possible minor errors. However, the applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objection

Claims 3-4 are objected to because of the following informalities:

- In claim 3, "the port", "the Ink container", "the ink" and "the recording head" lack antecedent basis.

In claim 4, "said ink container detecting means" lacks antecedent basis.

Appropriate correction is required.

CLAIM REJECTIONS

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 3 is rejected under 35 USC 102 (b) as being anticipated by Oda et al. (US Pat. 5,552,816).

Oda et al. disclose in Figures 1-6A an ink jet recording apparatus comprising scanningly reciprocable holding means (C) for holding a cartridge (H) on which the ink container (T) is detachably mounted, wherein the ink is ejected from the recording head (16) mounted to the cartridge (H) in accordance with an electric signal (not shown in the drawings but well known to those skilled in the art) for ink ejection to effect recording on the recording material.

Claim 3 is rejected under 35 USC 102 (b) as being anticipated by Buat et al. (US Pat. 5,119,115).

Buat et al. disclose in Figures 1-2 a support structure for an ink jet head comprising scanningly reciprocable holding means (12) for holding a cartridge (10) on which the ink container (32) is detachably mounted, wherein the ink is ejected from the recording head (35, 45) mounted to the cartridge (10) in accordance with an electric signal for ink ejection to effect recording on the recording material.

Claim 3 is rejected under 35 USC 102 (b) as being anticipated by Takagi et al. (US Pat. 5,359,357).

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Takagi et al. disclose in Figure 6 an ink jet recording apparatus comprising scanningly reciprocable holding means (C) for holding a cartridge (K) on which the ink container (T) is detachably mounted, wherein the ink is ejected from the recording head (H) mounted to the cartridge (K) in accordance with an electric signal for ink ejection to effect recording on the recording material.

Claim 3 is rejected under 35 USC 102 (e) as being anticipated by Imai (US Pat. 6,336,698).

Imai discloses in Figure 4 an ink jet color printer comprising scanningly reciprocable holding means (1) for holding a cartridge (7) on which the ink container (8a) is detachably mounted, wherein the ink is ejected from the recording head (4) mounted to the cartridge (7) in accordance with an electric signal for ink ejection to effect recording on the recording material.

Claims 3-4 are rejected under 35 USC 102 (e) as being anticipated by Hashimoto et al. (US Pat. 6,137,503).

Hashimoto et al. disclose in Figures 6-8 an ink jet recording apparatus comprising:

- scanningly reciprocable holding means (101) for holding a cartridge (103) on which the ink container (104, 105) is detachably mounted, wherein the ink is ejected from the recording head (102) mounted to the cartridge (103) in accordance with an electric signal for ink ejection to effect recording on the recording material (S); and
- wherein said ink container detecting means (111) is disposed adjacent a substantially vertical wall of said holding means (101).

Claims 3-4 are rejected under 35 USC 102 (a) as being anticipated by Takada et al. (EP Pat. 1 177904A1).

Takada et al. disclose in Figures 11-12, 16 and 18 an ink jet printer comprising:

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- scanningly reciprocable holding means (31) for holding a cartridge (34) on which the ink container (32) is detachably mounted, wherein the ink is ejected from the recording head (34D) mounted to the cartridge (34) in accordance with an electric signal for ink ejection to effect recording on the recording material; and
- wherein said ink container detecting means (16) is disposed adjacent a substantially vertical wall of said holding means (31) (Figure 11).

Claim Rejections - 35 U.S.C. § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Oda et al (US Pat. 5,552,816) in view of Kayano et al. (JP Pat. 2000135796 A).

Oda et al. disclose the basic features of the claimed invention were stated above but do not disclose an ink container detecting means that is disposed adjacent a substantially vertical wall of a holding means said ink container detecting means is disposed adjacent a substantially vertical wall of said holding means.

Kayano et al discloses in Figure 2 an ink jet printer comprising an ink container detecting means (42) is disposed adjacent a substantially vertical wall of said holding means (34).

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teaching of Kayano et al into the Oda et al ink jet printer the purpose of detecting the attachment of an ink cartridge to an ink cartridge holder.

Citation of Pertinent Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. These prior art references (US Pat. 6,832,830; US Pat. 6,502,917) cited in the PTO 892 form show an ink cartridge holder that is deemed to be relevant to the present invention. These references should be reviewed.


Allowable Subject Matter

Claims 1-2 are allowable. These claims would be allowable because none of the prior art references of record discloses an ink container detachably mountable to an ink jet recording apparatus comprising a projected abutment portion, provided adjacent a vertical side in a recess of a step portion forming in a bottom side and opening at the vertical side, for displacing the mechanical switch in the combination as claimed.

CONCLUSION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Anh Vo whose telephone number is (571) 272-2262. The examiner can normally be reached on Tuesday to Friday from 8:00 A.M. to 6:00 P.M..

The fax number of this Group 2861 is (703) 872-9306.


ANH T. N. VO
PRIMARY EXAMINER
April 27, 2005